Using Shield-Making to Promote Resilience by Increasing Mood and Self-Efficacy in Teachers Experiencing Burnout

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Institutional Review Board (IRB)

Albertus Magnus College

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DATE: April 15, 2024

TO: Leigha Rogers
FROM: Albertus Magnus College Institutional Review Board
PROJECT TITLE: Using Shield-Making to Promote Resilience by Increasing Mood and Self-Efficacy in Teachers Experience
IRB ID Number: 202324-005

SUBMISSION TYPE: Revised
DECISION: Approved
ACTION: COMPLETE

Dear Leigha Rogers:
The Albertus Magnus College Institutional Review Board (AMCIRB) by Expedited Review has considered the Revised submission for the project referenced above. Following this review, the AMCIRB has **Approved** this study, from 1/31/2024 to 1/31/2025.

Research activities (including screening, new recruitment, follow-up, and continued participation of enrolled participants) that have been approved may not be conducted beyond the expiration date stated above unless a continuation/renewal is requested and approved by the IRB.

If you have any questions, contact the AMCIRB at irb@albertus.edu . Please include your project title and IRB Project Number in all correspondence with the IRB.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Albertus Magnus College Institutional Review Board's records.

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Abstract

Teacher burnout is an increasingly important issue as it can negatively impact teachers, students, and school systems. This study explored the impact of creating strength shields on mood and self-efficacy as a measure of resilience for teachers self-reporting burnout compared to non-directed art-making. It was hypothesized that the experimental shield-making group would have a significant increase between pre- and post-test scores of the General Self-Efficacy Scale and the Positive Affect Schedule and a significant decrease in Negative Affect Schedule scores compared to the non-directed art-making control group. Findings indicated that art-making is effective at significantly increasing positive affect and general self-efficacy with teachers experiencing burnout. However, shield-making, specifically, did not demonstrate to be a more effective tool than non-directed art-making using a wide selection of materials for building resilience in teachers.

Using Shield-Making to Promote Resilience by Increasing Mood and Self-Efficacy in Teachers Experiencing Burnout

Teacher burnout is a highly occurring issue in the American school system often resulting in teachers quitting the profession and schools being left understaffed and overrun (Chang, 2009; Maslach et al., 2001). Burnout theory has been widely debated and definitions of the proposed syndrome have been discussed at length. However, it has been well established that teachers are at an increased risk of experiencing burnout (Chang, 2009; Maslach et al., 2001; Pines, 1993). Teachers experience an increased risk of burnout as they navigate administrative support, gaining student buy-in, and relationships with coworkers (Farber, 1982). As a result of this burnout, they may experience apathy for their students and, consequently, students may feel as though the teacher does not care about them.

The emotional well-being of teachers is directly related to student well-being. Prior to the pandemic, teachers who had been teaching for under 5 years were leaving at rates between 19-30% (Learning Policy Institute, 2018). Since returning to the physical classroom, teachers are facing new and additional challenges and teaching requirements, adding to the occupational stress of teaching (Panisoara et al., 2020; Westphal et al., 2022). As rates of teachers leaving the profession within the first five years continue to rise, and teacher shortages are happening in many states, it is vital for research to be conducted on how best to support teachers through occupational stress and burnout (Learning Policy Institute, 2018).

Emerging research has identified resiliency as a factor in the prevention and treatment of burnout (Van Breda, 2018). The concept of resiliency and its contributing factors continue to be a subject of ongoing research and investigation. Nevertheless, it is believed that factors such as positive mood and self-efficacy play a role in building resilience, which in turn can aid in the

treatment of burnout (Block & Block, 1980; Fletcher & Sakar, 2013; Grol & De Raedt, 2018; Schwarzer & Warner, 2013). Additionally, art therapy combined with directives to promote self-efficacy and positive mood may increase resiliency and lower the risk of burnout for teachers (Darewych, 2020; Garrosa & Moreno-Jiménez, 2013).

Theories of Burnout

For this present research burnout is defined as, "a complex and dynamic concept which was developed to give a name to the psychological effects of consistent occupational stress which has not been addressed and successfully managed" (Maslach, 1993; Maslach & Jackson, 1981; Schaufeli et al., 1993). This often occurs in workplaces with poor organization and management, which, in turn, creates an adverse experience for employees to navigate, requiring increased usage of psychological resources (Edú-Valsania et al., 2022). There are three dimensions in which burnout is measured: emotional exhaustion, feeling distant or cynical about one's occupation, and lower levels of self-efficacy (Maslach, 1993; Maslach & Jackson, 1981; Maslach & Schaufeli, 1993).

Although researchers initially believed that this phenomenon only affected helping professionals, emerging research shows that burnout could develop across all professions and occupations (Edú-Valsania et al., 2022). Since the initial articles about burnout were published in the mid-1970s, many theories have been developed about burnout, its meaning, and its causes (Maslach & Schaufeli, 1993). Some notable theories include the structural theory (Gil-Monte, et al., 1995), the existential theory (Pines & Aronson, 1988), the social exchange and comparison theory (Harrison, 1983; Maslach & Jackson, 1982), the conservation of resources theory (Hobfoll, 1989; Hobfoll & Freedy, 1993), and the multidimensional theory of burnout (Maslach, 1993).

Structural Model

When considering the etiology of burnout, the structural model considers the individual's personal, interpersonal, and organizational levels (Gil-Monte et al., 1995). In their initial research using this model, the interpersonal aspects researched by Gil-Monte et al., (1995) included feelings of competence and existential awareness that the occupation provided the individual. Secondly, they investigated the impact of social exchange in the workplace and emphasized these relationships that did not pose any threat. This model's final area of consideration is variables in the work environment. This includes the organizational structure and the climate of the organization.

The structural model maintains that burnout results from consistent and unrelenting work-related stress (Edú-Valsania et al., 2022; Gil-Monte et al., 1995). As individuals coping skills are depleted and they are unable to successfully cope with the stress, they begin to face emotional exhaustion and increased feelings of personal failure. As those individuals exhaust their coping skills, the structural theory suggests that this will increase feelings of depersonalization as a new form of coping. Depersonalization refers to excess feelings of negativity and callousness from caregivers to those in their care (Maslach, 1993). The result of burnout will lead to negative effects for both the individual and the organization. Giil-Monte (2005) proposes that, for some, one of these negative psychological effects is guilt. Based on this theory, individuals experiencing burnout can be clustered into two groups: those experiencing acute guilt and those not experiencing guilt. For those experiencing guilt, this causes greater work involvement to attempt to reduce the guilty feeling, and as working conditions remain consistent, this will cause emotional exhaustion to increase and thus perpetuate burnout causing a

loop. The structural theory has been empirically studied and contrasted across different occupational groups (Edú-Valsania et al., 2022).

Existential Theory

The existential theory of burnout proposes that the root cause of burnout is a human desire for our lives to have meaning (Pines & Aronson, 1988; Pines, 1993). If an individual defines one's life as meaningful, consequently, this person will feel a sense of importance and value. Therefore, when individuals feel they have failed in their attempt to find value and meaning in their work, the result is burnout (Pines, 1993). Existential theory argues that the innately human fear of death drives our search for meaning (Frankl, 1963). Furthermore, this theory argues that individuals who choose to find personal meaning through their occupation are at a higher risk for burnout than those who find meaning through other avenues such as religion (Pines, 1993).

For example, highly motivated nurses may set up professional expectations for themselves such as making life and death more comfortable for fellow human beings (Shubin, 1978). When nurses are unable to relieve their patient's pain and are subsequently unable to derive a sense of worth from their success in their work, they become at risk for burnout. Similarly, when teachers passionate about inspiring and educating students feel unsuccessful because of student apathy, increased mandated testing, other administrative duties, lack of support staff, and overcrowded classrooms, they are at risk for burnout (Farber, 1982). Therefore, when teachers cannot self-actualize and their needs for self-esteem are not validated, there is a high likelihood of burnout (Pines, 1993).

Social- Exchange and Comparison Theory

The social exchange and social comparison theory of burnout proposes that burnout is developed in a primarily social context (Buunk & Schaufeli, 1993; Maslach & Jackson, 1982). This imbalance can be measured on an interpersonal, team, and organizational level. According to this theory, the development and persistence of burnout can be understood through how an individual perceives, responds to, and constructs the behaviors of others in the workplace (Buunk & Schaufeli, 1993; Meier, 1983; Schaufeli, 2006). This imbalance is measured within interpersonal and organizational levels. The social exchange and comparison theory assumes that burnout only affects professionals working in helping occupations. Furthermore, it assumes that these professionals have working relationships with patients, clients, or students. Additionally, it proposes that social comparison and expectations of reciprocity play an important role within these relationships (Buunk & Schaufeli, 1993; Harrison, 1983). In fact, it has been shown that nurses in stressful situations avoid counsel with other nurses for fear of being judged (Cummings et al., 2005)

This theory surmises that professionals engage in social exchange with coworkers and superiors to cope with these relationships. Within these exchanges, individuals relate their experiences with others in similar positions as their own (Buunk & Schaufeli, 1993; Edú-Valsania et al., 2022). The cause of burnout and its persistence in these occupations may be rooted in these acts of social exchange and comparison and feelings of burnout can be measured by levels of self-esteem, reactivity, and orientation in the exchange (Buunk & Schaufeli, 1993).

Conservation of Resources (COR) Theory.

The conservation of resources theory applies a general stress theory to the development of burnout (Hobfoll, 1989; Hobfoll & Freedy, 1993). This model attempts to link the effects of

emotional labor and burnout. When individuals' labor resources are threatened, lost, or used without anticipation of them being replenished, there is a possibility for burnout. These labor resources include emotional, personal characteristics, and/or energies. According to Grandey (2000), emotional labor is the process of ensuring emotional expression and emotional regulation to support the organization's goals. Conservation of resources theory postulates that individuals are more sensitive to experiences of perceived loss in the workplace compared to positive, resource-replenishing experiences (Hobfoll & Freedy, 1993). For teachers, these perceived loss experiences might be considered negative teacher-parent interactions, an inability to successfully inspire students, or poor evaluations from school administration. The COR theory stresses the importance of resource gain as it reduces stress and those rich with resources are less likely to be put in vulnerable situations. Examples of resources would include money, support from loved ones, health insurance, and job security.

Within this model, resources may be reinvested to offset resource loss (Hobfoll & Freedy, 1993). Individuals who reinvest their money in different training courses may increase their self-esteem and networking resources. Burke (1989) postulates that a primary form of stress in the workforce is the inability to climb the organizational ladder and advance within an individual's field which he coined as "locking in." Hobfoll & Freedy (1993) consider this to be a form of resource loss as an individual has invested time, education, and skill without gaining the reward of advancement in the organization.

Multidimensional Theory

The multidimensional theory measures burnout in three components: emotional exhaustion, depersonalization, and feelings of reduced personal accomplishment (Maslach, 1993; Maslach, 1998; Maslach & Jackson, 1981; Maslach & Jackson, 1982). The definitions of

emotional exhaustion and depersonalization are defined the same as other theories however reduced personal accomplishment refers to reduced feelings of achievement and productivity in the workplace. This lower sense of self-efficacy has been linked to an inability to cope with workplace demands and depression (Maslach, 1998). The three dimensions of this model place burnout in an interpersonal, social context. Relationships between colleagues, clients, and supervisors have been central to the development of burnout. According to Maslach (1993, 1998) the nondimensionalization of these components in previous models loses sight of the phenomenon of burnout entirely.

Helping Occupations and Burnout

In their initial research, Maslach and Jackson (1981) found the phenomenon of burnout to be more prevalent in workers in helping professions. Since then, mass many studies have been conducted on burnout predominately for occupations such as nurses, doctors, clinicians, and teachers. The common denominator of these occupations being that they center around a professional using their resources to help others in a social context. Therefore, the etiology of burnout, mediating factors, and outcomes evidenced in research may be transferable to other helping professional populations, such as graduate school counseling students, paraprofessionals, and caregivers (Hughes & Kleist, 2005; Molina-Praena et al., 2018; Wardle & Mayorga, 2016).

Teacher Burnout. The teaching profession is categorically defined by high levels of burnout (Chang, 2009; Maslach et al., 2001). Factors related to burnout specific to the teaching profession include being isolated from other adults, focusing on day-to-day obligations, and limited time for reflection (Fullan, 2001). The isolation of teachers from other adults can result in boredom and frustration. Teachers may also face the depletion of their emotional and intellectual resources from the effort to successfully connect with their students and, furthermore, to help

their students connect with the subject matter (Woolfolk et al., 1990). According to Chang (2009), teachers face a higher number of emotional needs from students and parents, requiring more emotional labor and work from the teacher compared to other occupations. Additionally, teachers in the modern era face increased criticism through social media and helicopter parenting (Herman et al., 2018). As the pressure to pass students and improve student outcomes increases from administration and parents, resources are decreasing which adds additional stress for teachers. These higher emotional costs increase the possibility for teachers to experience emotional exhaustion.

Special education teachers are also vulnerable to burnout (Parks & Shin, 2020). Over the past 40 years burnout within this subset of teachers has been identified as a problem and closely studied. Special education burnout rates have been directly related with self-efficacy and support from school personnel. Furthermore, it has been proven that higher levels of administrative support decreases burnout in special education teachers.

The emotional well-being of teachers is crucial for the positive outcome of students (Harding et al., 2019). Research has shown that teacher well-being is directly associated with student well-being and psychological distress. The researchers concluded that the pathway to these positive relationships and mutual well-being is presenteeism in teachers and the quality of the student-teacher relationship.

Burnout symptoms have a direct effect on job performance. It has been shown that teachers who experience burnout have higher levels of absenteeism (Foldesy & Foster, 1989). Teacher presenteeism is an important factor in maintaining adequate quality of student education. It is also an important factor in establishing a teacher-student relationship, helping students feel more comfortable approaching teachers with questions and decreasing student

apathy. There is a direct relationship between teacher burnout and lower levels of student motivation and academic achievement (Madigan & Kim, 2021). It is vital for student success that teacher burnout continues to be researched and understood, especially as the roles of teachers continue to be changed and extended.

COVID-19 Impact. Since the COVID-19 (also known as coronavirus) pandemic, the rates of burnout, especially for those in nursing and other medical and helping professions, have significantly increased (American Psychological Association, 2021; Sullivan et al., 2022). Coronavirus is a severe and acute respiratory syndrome resulting in increased demand and work-related stress across helping professions (Sullivan et al., 2022). The pandemic resulted in the global shutdown of schools, restaurants, and other public domains as well as mandated quarantine periods for those who contracted the virus. The implications of these unprecedented circumstances are still being measured and documented across healthcare and other helping occupations.

Since the start of the COVID-19 pandemic, teachers have faced some new, and consistent challenges (Westphal et al., 2022). Specifically, as 1.5 billion students were displaced from the classroom, teachers were forced to invest increased resources in learning and facilitating virtual education (UNESCO, 2022; Westphal et al., 2022). When analyzing specific aspects of digital learning that contributed to increased teacher burnout, studies showed that teacher self-efficacy in digital classroom environments was closely linked with emotional exhaustion and lack of accomplishment (Panisoara et al., 2020; Westphal et al., 2022). Teacher burnout has been well documented and studied and in a post-COVID world, the implications, prevalence, and importance of the treatment of teacher burnout are acute.

Resilience

Resilience has been shown to be a protective factor against burnout (Garrosa & Moreno-Jiménez, 2013). Early research on resilience focused on child development and the variation between children in vulnerable and adverse conditions (Garmezy, 1971; Rutter & Madge, 1976; Werner & Smith, 1982). Although these vulnerable children were at higher risk for negative outcomes, some appeared to navigate challenges more successfully. Despite negative experiences, some children could subsequently recover, others showed little to no changes in functioning, and others appeared to exhibit higher levels of adaptation than before (Masten, 2011). Hence, the notion of resilience became defined (Van Breda, 2018). Van Breda (2018) defines resilience as, "the multilevel processes that systems engage in to obtain better-than-expected outcomes in the face or wake of adversity" (p. 4).

Adverse experiences can be categorized into acute and chronic (Bonanno & Diminich, 2012; Van Breda, 2018). Chronic adversity is adverse experiences that occur over an extended period typically having a lasting impact on an individual's life. Acute adverse experiences are typically a single occurrence with a definitive ending which may or may not, have a lasting impact throughout a person's life. Being defined within these two categories, burnout would be considered a chronically adverse event in which individuals are faced with the task of coping with adversity while it is ongoing (Van Breda, 2018). Resiliency consists of four main constructs: hardiness (Kobasa, 1979), sense of coherence (Antonovsky, 1979), self-efficacy (Bandura, 1982), and grit (Duckworth et al., 2007). Within these constructs, various individual variables have been identified: problem-solving skills, emotional regulation, optimism, and motivation (Van Breda, 2018). The primary focus of the present research will be attributed to self-efficacy and mood as indicators of resilience.

Self-Efficacy

Bandura (1997) defined the construct of perceived self-efficacy as "an individual's belief that they can successfully perform novel and difficult tasks." Perceived self-efficacy makes a difference in how individuals think, feel, and act in the face of adversity (Bandura, 1997; Luszczynska, 2005a). People who have a higher sense of self-efficacy generally trust their ability to solve complex problems and tend not to view these problems as unsolvable. They typically think in self-enhancing ways, can motivate themselves, and have less negative emotional arousal while solving these life stressors. Contrarily, individuals with low self-efficacy tend to face depression and anxiety when faced with these adverse life experiences (Bandura, 1995; Bandura, 1997). They are more likely to experience self-critical thinking and tend to internalize their failures more deeply than their successes.

This course of thinking may turn into a self-fulfilling prophecy for each group (Bandura, 1995; Jerusalem & Schwarzer, 1992). Those with high self-efficacy have a greater belief in their ability to succeed, therefore they seek higher levels of success compared to people with low self-efficacy. Individuals with low self-efficacy tend to believe they cannot accomplish difficult tasks and subsequently give up prematurely. This in turn validates their idea that they were unable to complete the task. Thus, the relationship between self-efficacy and behavior may perpetuate a cycle of thinking and behavior.

Resiliency and self-efficacy are empirically related (Schwarzer & Warner, 2013). As resiliency is defined by one's ability to cope in the wake of or during a stressful life event, resiliency cannot be demonstrated without the presence of a life stressor (Masten, 2001; Van Breda, 2018). However, self-efficacious beliefs can be demonstrated prior to or without the presence of a life stressor for example, as one prepares for a career change, or generally planning

their future (Berry & West, 1993). Therefore, having a high sense of self-efficacy may promote resilience in the face of adversity (Schwarzer & Warner, 2013). Having access to the motivational, affective, and behavioral mechanisms of high perceived self-efficacious individuals may promote their capacity for resilience in the face of adverse experiences. Therefore, self-efficacy has been used as a measurable component of resiliency (Luszczynska et al., 2005b; Rutter, 1987; Schwarzer & Warner, 2013).

Self-efficacy being used as a measure against burnout is well established across occupations (Schwarzer & Warner, 2013). Results of studies on teachers from Germany, China, and Syria found that those who reported higher levels of perceived self-efficacy were less likely to report symptoms of burnout (Schwarzer & Hallum, 2008). The same outcome of higher reported perceived self-efficacy decreasing the likelihood of symptoms of burnout was found in a study focusing on information technology workers (Salanova et al., 2002). A study conducted by Ventura et al. (2015) looked at the significance of self-efficacy in teachers as it relates to burnout or engagement. Results showed a positive correlation between self-efficacy and engagement, and a negative correlation between self-efficacy and burnout symptoms. As research and understanding about burnout and its relationship to resilience and self-efficacy continues to grow, it becomes increasingly important to understand how these constructs can be promoted to reduce and prevent burnout.

Mood

Cognitive flexibility is defined as, “an individual's ability to deliberately move between different states of thought, mental sets, or mood” (Grol & De Raedt, 2018). Research conducted by Genet & Seimer (2011) has directly linked the cognitive processing of mood to resilience. Therefore, cognitive flexibility as it relates to emotional information may be integral in building

resiliency (Genet & Seimer, 2011). This process of cognitive flexibility in the context of emotions will be referred to as "affective flexibility" (Grol & De Raedt, 2018). Grol and Raedt (2018) found that positive mood had a positive correlation with affective flexibility. Individuals with higher positive mood appear more able to quickly move on and recover from no longer relevant negative affective information. Therefore, positive mood may improve affective flexibility, thereby supporting resilience (Grol & Raedt, 2018).

Art Therapy

To facilitate mood and emotional regulation, the integration of motor, sensory, and cognitive input is necessary (Hass-Cohen & Findlay, 2015). These factors are all essential components of the art-making process as it requires decision-making (cognitive), the physical act of creating (motor), and the tactile aspect of art materials (sensory). Creating art has also shown to increase activation in the amygdala and prefrontal cortex which are two regions of the brain known to be responsible for emotional regulation (Hass-Cohen & Carr, 2008). Based on the previous notion, art-making has been shown to improve emotional and mood regulation.

Art therapy combines visual art and psychotherapy to promote personal growth, assist in emotional reparation, and increase self-understanding which has been developed and studied since the 1940s (Malchiodi & Vick, 2012). This process includes the therapeutic process of creating the art, as well as the therapeutic process of viewing and discussing the artist's product. Within art therapy, there are different theoretic approaches to be utilized by the art therapist. One of these theoretical approaches is the integration of positive psychology with art therapy.

Positive Psychology, Art Therapy and Resilience

The main position of positive psychology is to promote individual strengths and virtues that promote motivation and resilience (Wilkinson & Chilton, 2013). Positive psychologists help

clients experience a more engaged and meaningful life (Duckworth et al., 2005). According to positive psychology, in order to live a full life five distinct and measurable elements must be addressed and improved. They are positive emotions, engagement, positive relationships, meaning, and accomplishments, also referred to as PERMA (Gussak et al., 2016; Seligman, 2011).

Art therapy is easily integrated into a positive psychology framework as art-making inherently promotes positive emotions and engaged mindfulness (Rubin et al., 2016; Wilkinson & Chilton, 2013). Art therapy presents many avenues for positive emotions to be experienced and expressed within the art-making process, and while the art is being discussed (Rubin et al., 2016). The engagement aspect of PERMA can be established through strength exploration. Directive approaches to encourage clients to explore their individual strengths that may have otherwise gone unnoticed or diminished can be an empowering experience. Free art-making has been shown to lower negative affect and improve positive affect and self-efficacy in healthy adults (Kaimal & Ray, 2016).

Within the positive psychology framework, art therapists can develop and execute directives with clients to assist them in recognizing and internalizing their strengths. Strength-based directives and approaches to art therapy have been shown to promote resiliency (Fabbri, 2017; Fanian et al., 2015; Berberian & Davis, 2019). Furthermore, Berberian (2020) noted that the artistic process's inherent decision-making can serve as a safe place for clients to gain a sense of mastery to promote self-efficacy and thereby improve resilience. One such directive that art therapists have used to promote client strengths is shield-making.

Shield-Making in Art Therapy

Historically, warrior shields were decorated with heraldic designs as a way to bring magic to the shield and protect the warrior (Walker, 1988). Creating a shield from art materials generates symbolism that magnifies a client's strengths and provides a magical form of protection and can be a useful intervention in art therapy. For example, a modified shield-making directive by Darewych (2020), asks participants to apply various decorative materials such as paint, tissue paper, and glitter to a cardboard shield cutout. Using a list of character strengths participants list five strengths they most strongly identify with. The participants are then asked to use the decorative materials and identify key character strengths to decorate the shield in a symbolic way that represents the strengths. Framed in positive psychology, this art therapy directive can promote self-efficacy and positive affect by directly asking clients to focus on positively perceived attributes. This, in turn, may assist in improving resiliency and thus help to reduce the risk of burnout.

Teachers face increased levels of burnout, making it an important topic of study in the field of helping professions. In addition to the lack of administrative support and the negative implications of the pandemic on student learning, teachers face increased anxiety around school-based gun violence which was not discussed in this review. Improved resiliency may be a protective factor for burnout (Garrosa & Moreno-Jiménez, 2013). Resiliency can be strengthened by increasing self-efficacy and positive mood (Luszczynska et al., 2005b; Rutter, 1987; Schwarzer & Warner, 2013). Art therapy has inherent qualities that help to promote positive mood and self-efficacy. When art therapy is combined with a positive psychology framework, clients can explore personal strengths and internalize what may have otherwise gone unnoticed (Rubin et al., 2016; Wilkinson & Chilton, 2013).

It is hypothesized that the experimental shield-making group will have significant increases in self-efficacy and positive affect and a significant decrease in negative affect relative to the non-directed art-making control group to promote resilience in teachers experiencing burnout.

Method

Participants

The sample consisted of 18 participants in this study who were recruited via word of mouth and flyers (see Appendix A) posted in the community (i.e. local libraries and school) as well as on social media platforms. Participants were teachers from primary schools (67%), secondary schools (22%), and post-secondary schools (11%) in Upstate New York, with 78% from public schools and from 22% private schools. Participants' age ranged from 24 to 61 (M = 39, SD = 12.6). The sample was 89% female, 6% male, and 6% non-binary. Most of the population identified as white (94%) and 6% identified as Native American. The entire sample identified as non-Hispanic. The number of years teaching ranged from 3 to 37 (M = 15.3, SD = 11.7). The participants identified their estimated length of burnout as follows: less than one year (22%), 1-2 years (33%), 2-3 years (27%), and 3-4 years (17%). Most of the participants (72%) had a master's level education and the remainder (28%) had a bachelor's level education.

Measures

Positive and Negative Affect Schedule (PANAS)

The Positive and Negative Affect Schedule consists of 20 words describing various feelings and emotions. The instructions ask participants to rate on a scale of 1 (very slightly or not at all) to 5 (extremely) how strongly they are feeling each of the 20 different emotions in the present moment (Watson, Clark & Tellegen, 1988). The purpose of this scale is to measure an

individual's level of positive affect and negative affect in their current state. To score the scale, the scoring sheet indicates which of the 20 emotions are considered positive and which are considered negative. The scorer then adds the individual items identified as positive and repeats the process for the negative items. Lower scores for negative items suggest lower negative affect and higher scores suggest higher positive affect. The scoring sheet then provides the scorer with mean scores for both positive and negative affect. In a validation study of the measure, a diverse population of adults participated in the study (N = 4,217) and the researchers found a relatively high alpha reliability for positive affect ranging from .86 to .90 and from .84 to .86 for negative affect.

The PANAS scale was additionally tested for reliability against the Beck Depression Inventory (BDI) (Beck et al., 1961). The BDI is a self-measure consisting of 21-question survey of depressive symptoms (Watson, Clark & Tellegen, 1988). Participants indicate whether they have experienced the symptoms in the past few days. The study found a relatively high correlation with the negative affect scale of PANAS (r = .56) and a low correlation with the positive affect scale of PANAS (r = .35) (p < .05). Additionally, the PANAS scale tested for reliability against the State-Trait Anxiety Scale (Spielberger et al., 1970). The study found a positive correlation between the State-Trait Anxiety Scale and the negative affect scale of PANAS (r = .51) and a low correlation with the positive affect scale of PANAS (r = .35) (p < .05).

General Self Efficacy Scale

The General Self-Efficacy scale measures the strength of an individual's belief in one's ability to solve complex problems and any associated setbacks (Schwarzer & Jerusalem, 1995). The scale provides a list of 10 statements regarding the participant's beliefs about their abilities

to solve complex problems. The participants are asked to rate their beliefs about their abilities on a scale of 1 (not true at all) to 4 (exactly true) for each statement. To score, the administrator adds together the sum of the participant's ratings for the 10 statements. The score reflects the participant's generalized sense of self-efficacy. The higher the score, the greater the sense of self-efficacy the participant possesses. This study used 1,660 German adults ranging in age from students to older adults. Across the five sample studies, there was a high internal consistency with alphas ranging from .82 to .93. There have been positive correlations found with measured self-esteem (r = .52), internal control beliefs (r = .40), and optimism (r = .49). Negative correlations have been attributed to general anxiety (r = -.54), performance anxiety (r = -.42), shyness (r = -.58), and pessimism (r = -.28).

Materials

Participants were provided with either an S&S Worldwide, Inc. blank precut heavy paperboard shield (17in. x 11.5in.) or a piece of multimedia paper (12in. x 18in.) along with: AnyMark dual tip alcohol markers provided in 60 colors, Sax heavy body acrylics 6 color set, a Princeton Real Value series 9100 4-piece synthetic brush set, an Elmer® glue stick, Mod Podge Gloss®, a Craft Smart® 1-inch foam brush, a pair of 8in. Fiskars Titanium SoftGrip ® scissors, and preselected and cut collage materials (see Appendix B and Appendix C). The experimental shield-making group also received a preprinted and cut list of 20 key character strengths (see Appendix D).

Procedure

This study was face-to-face and the intervention took place in an individual setting. To meet the eligibility of this study, participants were asked to complete a demographics form (see Appendix E) and answer "yes" to feeling burned out. Eligible voluntary participants were then

asked to review and sign an informed consent form (see Appendix F) and an art release form (see Appendix G). From this point, participants were randomly assigned to the experimental shield-making group or the control group. Prior to the experiment, participants were asked to fill out the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995), and the Positive and Negative Affect Schedule (Watson & Tellegen, 1988).

Participants assigned to the shield-making groups were given the following script to avoid confusion and to not influence their creative process. "Please take some time to review the pre-cut strength words in front of you. Identify five key words that you most identify with, or that you feel you need to support yourself through your workday. Next, use the paint, collage materials, and markers to decorate the pre-cut shield. Be sure to include the five strength words you identified." Following the art-making, there was a brief discussion about the process.
The control group was given similar materials as the experimental group. However, instead of being given a precut shield, they were given a similarly sized piece of multimedia paper. They were given the same decorative materials as the experimental group excluding the precut strength words and the precut collage material were neutral in nature.

Participants were then asked again to complete the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995), and the Positive and Negative Affect Schedule (Watson & Tellegen, 1988) again. Finally, they were given a debriefing form (see Appendix H) with information on where to reach out if more support was needed as well as a thank you for their effort of participation.

Results

A paired-sample *t*-test was conducted to compare change from pre- to post-intervention for both the experimental shield-making group ($N = 9$) and the control group ($N = 9$).

Specifically, the researcher examined whether there was an increase in general self-efficacy, an increase in positive affect, and a decrease in negative affect. A significant increase was found for the shield-making group for pre (M = 33.22, SD = 6.72) and post (M = 39.22, SD = 9.39) positive affect scores $t(8) = 2.83$, $p = .01$, *Cohen's d* = .94, and for pre (M = 29.89, SD = 5.64) and post (M = 31.78, SD = 4.97) general self-efficacy scores, $t(8) = 2.71$, $p = .01$, *Cohen's d* = .90. In contrast, no significant difference was found for pre (M = 17.22, SD = 3.07) and post (M = 15.11, SD = 6.74) negative affect scores $t(8) = -.98$, *Cohen's d* = -.33. For the control group, significant increase was found for pre (M = 32.78, SD = 9.02) and post (M = 37.89, SD =7.06) positive affect scores $t(8) = 2.52$, $p = .02$, *Cohen's d* = .84, pre (M =32.33 , SD =3.00) and post (M = 34.22 SD = 3.31) general self-efficacy scores, $t(8) = 3.51$, $p = .004$, *Cohen's d* = 1.17, as well as a decrease in pre (M =13.11 , SD =1.76) and post (M =11.22 , SD = 1.64) negative affect scores, $t(8) = -3.21$, $p = .006$, *Cohen's d* = -1.07.

An independent t-test was conducted to establish if there was a significant change in scores between groups. No significance was found in increase in positive affect between the shield-making group (M = 6.00, SD = 6.36) and the control group (M = 5.11, SD = 6.09), $t(16) = .303$, *Cohen's d* = .142. Similarly, no significance in increase in general self-efficacy was found between the shield-making group (M = 1.89, SD = 2.1) and the control group (M = 1.89, SD = 1.62), $t(16) = .000$, *Cohen's d* = 0, nor decrease in negative affect between the shield-making group (M = -2.11, SD = 1.62) and the control group, $t(16) = -.10$, *Cohen's d* = -.05.

Discussion

The present study aimed to measure if shield-making (experimental) was a more effective tool than non-directed art-making (control) at improving affect and general self-efficacy as a measure of resilience for teachers experiencing burnout. Participants in the experimental group

were asked to identify five words they most identify with from a prefabricated list of 20 strength words and use them to decorate a shield using a selection of various art materials. The control group was provided with a similarly sized sheet of multi-media paper along with similar materials and was asked to create a piece of art. Both groups were given a demonstration and explanation on how to use the art materials prior to the art-making. It was hypothesized that the experimental shield-making group would demonstrate a statistically significant increase in general self-efficacy and positive affect, and a decrease in negative affect, compared to the non-directed art-making group, following the directive. While the main hypothesis was not supported, the results of this study indicate that art-making using a wide selection of materials including acrylic paint with brushes, markers, collage materials, and bleeding tissue paper is an effective tool to build resilience for teachers experiencing burnout. The increases in general self-efficacy and positive affect had statistical significance for both the control and experimental shield-making group. There was not a statistically significant change in negative affect for the experimental group, but there was for the control group.

While strength shield-making, specifically, did not demonstrate to be a more effective tool than non-directed art-making using a wide selection of materials for building resilience in teachers experiencing burnout, the results of this study remain consistent with the literature. Art-making has shown to increase positive affect as evidenced by statistically significant increases in positive affect for both the control and the experimental groups (Haas-Cohen & Findlay, 2015; Malchiodi & Vick, 2012). Additionally, because the experimental shield-making group used a positive psychology-based directive, the increased focus on individual strengths may have limited the activation or deactivation of negative affect for the experimental group, resulting in a non-statistically significant change in negative affect for the group.

Splitting the population by length of burnout offered further insight into the population. As shown in Figure 1, teachers who have been experiencing burnout for less than one year had the highest increase in mean general self-efficacy scores compared to those experiencing burnout for longer periods of time. In contrast, teachers experiencing burnout for 4-5 years had the highest increase in mean positive affect scores and decrease in mean negative affect scores. This elicits further questions surrounding teacher burnout and its relationship to general self-efficacy and affect.

Furthermore, the complex symbolism of the shield should be reexamined when considering an art directive for this population. Literature describes the universal symbolism of decorative shields as a form of magical protection for its user (Walker, 1988). However, given the catastrophic increase in school shootings and efforts to protect teachers, staff, and students, a different interpretation of the symbol of a shield should be considered. In 2022, a school district in New Jersey issued their teachers armored shields in defense of an active shooter incident within the school (Watson, 2022). According to a survey conducted by the National Institute of Justice in 2018, approximately 90% of districts encourage their schools to educate and train their teachers about what to do or expect during an active shooter incident and about 85% of schools offer training to their staff on emergency safety procedures (Carlton, 2022). Gun violence in schools has gained frequency in the past 25 years and is now at its highest recorded level in history (Rapa et al., 2024). The increased concern for teacher safety may have consciously or unconsciously affected their personal prescribed symbolism for the shield- effecting their negative affect. Art therapists should remain aware of the current implications of symbols and use discretion while working with universal symbols within specific populations.

Within the experimental condition, several trends in the art-making were noted and may offer insight into the population and their relationship to art-making and burnout. For example, Figure 2 shows a piece of art created by a participant who reported high increases in general self-efficacy and positive affect as well as a high decrease in negative affect after the shield-making directive. The shield in Figure 2 shows heavy patterning and line-based art-making. The participant was highly selective while choosing colors to incorporate into the artwork, opting to work with complementary colors. The final piece added to the shield was what the participant identified to be the Superman© "S" in the center. The participant appears to have succeeded at creating an empowered shield as evidenced by the results of their pre- and post- Positive and Negative Affect Schedule and General Self-Efficacy Scale scores which align with their well-constructed and intentional use of art materials and inclusion of the Superman© logo. The art is expansive and uses all available space on the shield and the composition is balanced and structured. These observations about the art-making remain true for the entirety of the shield-making group. This organization and intentionality could be influenced by the more structured approach to the experimental art-making group.

In contrast, the art of the control group was more organic, meaning less intentional and more fluid, compared to the experimental group. Although the art of the control group generally filled all the available space, the composition was typically unbalanced and appeared less intentional compared to the experimental group. Figure 3 is an example of a control group participant who exhibited a high increase in general self-efficacy and positive affect as well as a high decrease in negative affect after non-directed art-making. As the artwork fills the page, the composition is asymmetrical and focused more heavily on the left side resulting in an unbalanced construction. The art is largely form-based and experimental exhibiting a diversion of emotion as

it depicts nature imagery such as the tree and leaves rather than an emotional representation of the burnout feelings the participant was discussing. This might be a result of the non-structured art-making allowing the client to explore and settle into a more meditative and emotionally divertive expression of art-making.

The artwork shown in Figure 4 is another representation of a participant from the control group who exhibited high increases in general self-efficacy and positive affect as well as a high decrease in negative affect after art-making. However, the art that emerged in this instance appears to be highly expressive of the participant's current perceived level of burnout. The mouse figure on the left side of the piece appears forlorn and the expressive marks surrounding the figure could represent the participant's anxiety, which they expressed feeling to the interviewer when they said they were a highly anxious individual. Additionally, there are barriers of rock and wood created from preselected collage materials surrounding the figure which may represent the person’s feelings of isolation and a lack of support which they also described to the interviewer. Although the sun appears to be smiling in the image, the face still seems to be distressed. This dissonance could be what the participant feels about their burnout -putting on a smiling face while feeling distressed beneath it. This form of expression may also result from the less structured approach to art-making of the control group. In this instance, the lack of structure allowed the participant to more directly express their complex feelings of burnout through the art that may not be captured in a more positively skewed strength-based directive.

Across all three examples of art-making, each participant chose to express one’s own inner emotions through different means and styles. Despite this fact, the non-directed art-making using a wide range of materials significantly increased their positive affect and general self-efficacy while simultaneously lowering their feelings of negative affect. The more intentional

and balanced compositions of the shields in the experimental group could be a result of the structured strength shield directive compared to the looser and non-directed control group. Furthermore, the more structured strength-focused approach of the experimental group may have limited the amount of negative affect that was affected by the art-making resulting in a statistically non-significant change in negative affect for the shield-making group. The less structured approach may have allowed participants to further explore the feelings of negative affect resulting in statistically significant change.

The present study offers clinical implications to the field of art therapy. This study employed a wide range of materials across the expressive therapies continuum (Lusebrink, 2015). The expressive therapies continuum theory states that materials that have a higher viscosity, such as paint, elicit higher emotional activation than materials with more control, such as markers. This allowed the participants to choose the fluidity of their material and thus have more control of their emotional activation during their interview. While in art therapy practice, it is important to meet the client where they are and similarly offer a wide range of materials for expression. Additionally, understanding when a client would benefit from a more or less structured directive is imperative to the art therapy practice. Highly structured directives can inhibit free emotional expression as evidenced by the results of the present study (Malchiodi, 2012). As noted, the highly directed experimental group had very intentional and line-based imagery compared to the more fluid and organic expression of the control group.

The present study has some limitations that may have affected the results. The sample population was not diverse and consisted predominately of women of the same white non-Hispanic ethnicity group and similar age groups. A larger sample size from a larger more diverse city would result in a more representative sample population. Additionally, to make this study

replicable and focus on strength-based expression, strength words for the experimental group and collage materials for both the experimental and the control group were predetermined for consistency. This may have limited expression and thereby also contributed to the more line-based and structured artwork of the shield-making group.

Future research should be conducted to better understand how art therapy can effectively help teachers experiencing burnout. This could be achieved by conducting separate studies divided by the lengths of time the teachers have been in their profession. Future research might also find value in examining separate studies divided into the length of time teachers have been experiencing feelings of burnout. Additionally, research should be conducted on testing structured versus less structured strength-focused directives with teachers experiencing feelings of burnout.

References

Antonovsky, A. (1979). *Health, stress, and coping*. Jossey-Bass.

Bandura, A. (Ed.). (1995). *Self-efficacy in changing societies.* Cambridge University Press. https://doi.org/10.1017/CBO9780511527692

Bandura, A. (1997). *Self-efficacy: The exercise of control.* W H Freeman/Times Books/ Henry Holt & Co.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*(2), 122–147. https://doi.org/10.1037/0003-066X.37.2.122

Beck, A. X, Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4,* 561-571.

Berberian, M. (2020). Creative problem-solving in art therapy: An overview of benefits to promote resilience. In M. Berberian & B. Davis (Eds.), *Art therapy practices for resilient youth: A strengths-based approach to at-promise children and adolescents* (pp. 13–32). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9781315229379-2

Berberian, M., & Davis, B. (Eds.). (2019). *Art therapy practices for resilient youth: A strengths-based approach to at-promise children and adolescents*. Routledge.

Berry, J. M., & West, R. L. (1993). Cognitive self-efficacy in relation to personal mastery and goal setting across the life span. *International Journal of Behavioral Development, 16*(2), 351–379. https://doi.org/10.1177/016502549301600213

Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.), Development of cognition, affect and social relations: The Minnesota symposia on child psychology (Vol. 13, pp. 39-101). Hillsdale, NJ: Erlbaum.

Bonanno, G. A., & Burton, C. L. (2013). Regulatory Flexibility: An Individual Differences Perspective on Coping and Emotion Regulation. *Perspectives on psychological science: a journal of the Association for Psychological Science*, *8*(6), 591–612. https://doi.org/10.1177/1745691613504116

Bonanno, G. A., & Diminich, E. D. (2012). Annual research review: Positive adjustment to adversity–trajectories of minimal–impact resilience and emergent resilience. *Journal of Child Psychology and Psychiatry*, *54*(4), 378–401. https://doi.org/10.1111/jcpp.12021

Burke, R. J. (1989). Toward a phase model of Burnout. *Group & Organization Studies*, *14*(1), 23–32. https://doi.org/10.1177/105960118901400104

Buunk, B. P., & Schaufeli, W. B. (1993). Burnout: A perspective from social comparison theory. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), Professional burnout: Recent developments in theory and research (pp. 53-66). Washington, DC: Taylor & Francis.

Carlton, M. P. (2022). *Training for school personnel to prevent, prepare, and respond to school safety incidents*. National Institute of Justice. https://nij.ojp.gov/topics/articles/training-school-personnel-prevent-prepare-and-respond-school-safety-incidents

Chang, M.-L. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review*, *21*(3), 193–218. https://doi.org/10.1007/s10648-009-9106-y

Cummings, G., Hayduk, L., & Estabrooks, C. (2005). Mitigating the impact of hospital restructuring on nurses: the responsibility of emotionally intelligent leadership. *Nursing research*, *54*(1), 2–12. https://doi.org/10.1097/00006199-200501000-00002

Darewych, O. H. (2020). Strengths Shield. In *Positive psychology arts activities: Creative tools for therapeutic practice and supervision* (pp. 75–76). essay, Jessica Kingsley Publishers.

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology, 92*(6), 1087–1101. https://doi.org/10.1037/0022-3514.92.6.1087

Duckworth, A. L., Steen, T. A., & Seligman, M. E. P. (2005). Positive psychology in clinical practice. *Annual Review of Clinical Psychology, 1*(1), 629–651. https://doi.org/10.1146/annurev.clinpsy.1.102803.144154

Edú-Valsania, S., Laguía, A., & Moriano, J. A. (2022). Burnout: A review of theory and measurement. *International Journal of Environmental Research and Public Health*, *19*(3), 1780. https://doi.org/10.3390/ijerph19031780

Fabbri, C. (2017). *Promoting Resiliency: A Strength-Based Approach* (Doctoral dissertation, University of Alaska Fairbanks).

Fanian, S., Young, S. K., Mantla, M., Daniels, A., & Chatwood, S. (2015). Evaluation of the K ts' iihtła ("We Light the Fire") Project: building resiliency and connections through strengths-based creative arts programming for Indigenous youth. *International Journal of Circumpolar Health*, *74*(1), 27672.

Farber, B. A. (1982). *Stress and burnout implications for teacher motivation*. Distributed by ERIC Clearinghouse.

Fletcher, D., & Sarkar, M. (2013). Psychological resilience: A review and critique of definitions, concepts, and theory. *European Psychologist, 18*(1), 12–23. https://doi.org/10.1027/1016-9040/a000124

Frankl, V.E. (1963). Man's search for meaning: an introduction to logotherapy.

Foldesy, G., & Foster, L. (1989). The impact, causes, and prevention of excessive teacher absenteeism. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *63*(2), 82–86. https://doi.org/10.1080/00098655.1989.9955732

Fullan, M. (2001). The new meaning of educational change. New York: Teachers College.

Garmezy, N. (1971). Vulnerability research and the issue of primary prevention. *American Journal of Orthopsychiatry*, *41*(1), 101–116. https://doi.org/10.1111/j.1939-0025.1971.tb01111.x

Garrosa, E., & Moreno-Jiménez, B. (2013). Burnout and active coping with emotional resilience. In S. Bährer-Kohler (Ed.), *Burnout for experts: Prevention in the context of living and working* (pp. 201–221). Springer Science + Business Media. https://doi.org/10.1007/978-1-4614-4391-9_13

Genet, J. J., & Siemer, M. (2011). Flexible control in processing affective and non-affective material predicts individual differences in trait resilience. *Cognition & emotion*, *25*(2), 380–388. https://doi.org/10.1080/02699931.2010.491647

Gil-Monte, P. R., Peiró, J. M. y Valcárcel, P. (1993): Estrés de rol y autoconfianza como variables antecedentes en el síndrome de burnout en profesionales de Enfermería. En L. Munduate y M. Barón (Comp.), Gestión de Recursos Humanos y Calidad de Vida Laboral (pp. 231- 241). Madrid: Eudema.

Gil-Monte, P. R. (2005). El síndrome de quemarse por el trabajo (Burnout): una enfermedad laboral en la sociedad del bienestar. Madrid: Pirámide, pp. 186.

Grandey, A. A. (2000). Emotional regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, *5*(1), 95–110. https://doi.org/10.1037/1076-8998.5.1.95

Grol, M., & De Raedt, R. (2018). The effect of positive mood on flexible processing of affective information. *Emotion, 18*(6), 819–833. https://doi.org/10.1037/emo0000355

Gussak, D. E., Rosal, M., & Isis, P. D. (2016). Positive Psychology. In *The Wiley Handbook of Art therapy* (pp. 90–98). essay, Wiley Blackwell.

Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingworth, W., Tilling, K., Evans, R., Bell, S., Grey, J., Brockman, R., Campbell, R., Araya, R., Murphy, S., & Kidger, J. (2019). Is teachers' mental health and wellbeing associated with students' mental health and wellbeing?. *Journal of affective disorders*, *242*, 180–187. https://doi.org/10.1016/j.jad.2018.08.080

Harrison, W. D., (1983). A social competence model of burnout. B.A. Farber (Ed.), *Stress and burnout in the human services professions* (pp. 29-39). New York: Pergamon Press.

Hass-Cohen, N., & Carr, R. (2008). *Art therapy and clinical neuroscience*. Jessica Kingsley Publishers.

Hass-Cohen, N., & Findlay, J. C. (2015). *Art therapy and the neuroscience of relationships, creativity, and resiliency: Skills and practices.* W. W. Norton & Company.

Herman, K. C., Hickmon-Rosa, J., & Reinke, W. M. (2018). Empirically Derived Profiles of Teacher Stress, Burnout, Self-Efficacy, and Coping and Associated Student Outcomes. Journal of Positive Behavior Interventions, 20(2), 90-100. https://doi.org/10.1177/1098300717732066

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*(3), 513–524. https://doi.org/10.1037/0003-066X.44.3.513

Hobfoll, S. E., & Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 115–133). Taylor & Francis.

Hughes, F. R., & Kleist, D. M. (2005). First-semester experiences of Counselor Education Doctoral students. *Counselor Education and Supervision*, *45*(2), 97–108. https://doi.org/10.1002/j.1556-6978.2005.tb00133.x

Jerusalem, M., & Schwarzer, R. (1992). Self-efficacy as a resource factor in stress appraisal processes. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action* (pp. 195–213). Hemisphere Publishing Corp.

Kaimal, G., & Ray, K. (2016). Free art-making in an art therapy open studio: Changes in affect and self-efficacy. Arts and Health, 9(2), 154–166. https://doi.org/10.1080/17533015.2016.1217248

Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, *37*(1), 1–11. https://doi.org/10.1037/0022-3514.37.1.1

Learning Policy Institute. (2018). *Understanding teacher shortages: 2018 update*. https://learningpolicyinstitute.org/product/understanding-teacher-shortages-interactive

Lusebrink, V. B. (2015). Expressive therapies continuum. *The Wiley Handbook of Art Therapy*, 57–67. https://doi.org/10.1002/9781118306543.ch6

Luszczynska, A., Gutiérrez□Doña, B., & Schwarzer, R. (2005a). General self□efficacy in various domains of human functioning: Evidence from five countries. *International Journal of Psychology*, *40*(2), 80–89. https://doi.org/10.1080/00207590444000041

Luszczynska, A., Scholz, U., & Schwarzer, R. (2005b). The general self-efficacy scale: multicultural validation studies. *The Journal of psychology*, *139*(5), 439–457. https://doi.org/10.3200/JRLP.139.5.439-457

Malchiodi, C. A. (2012). Chapter 3: Art Therapy Materials, Media, and Methods. In *Handbook of art therapy*. essay, Guilford

Malchiodi, C. A., & Vick, R. M. (2012). Chapter 1: A Brief History of Art Therapy. In *Handbook of art therapy*. essay, Guilford.

Maslach, C. (1993). Burnout: A multidimensional perspective. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 19–32). Taylor & Francis.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach Burnout Inventory: Third edition. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (pp. 191–218). Scarecrow Education.

Maslach C. (1998). A multidimensional theory of burnout. In C. L Cooper, *Theories of Organizational Stress* (pp. 68–85). Oxford, NY: Oxford University Press.

Maslach, C. and Jackson, S.E. (1981) The Measurement of Experienced Burnout. Journal of Organizational Behavior, 2, 99-113. http://dx.doi.org/10.1002/job.4030020205

Maslach, C. and Jackson, S.E. (1982) Burnout in health professions: A social psychological analysis. In: Sanders, G.S. and Suls, J., Eds., Social Psychology of Health and Illness, Erlbanm, Hillsdale, 227-251

Maslach, C., & Schaufeli, W. B. (1993). Historical and conceptual development of burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 1–16). Taylor & Francis.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, *52*, 397–422. https://doi.org/10.1146/annurev.psych.52.1.397

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*(3), 227–238. https://doi.org/10.1037/0003-066X.56.3.227

Masten, A. S. (2011). Resilience in children threatened by extreme adversity: Frameworks for research, practice, and Translational Synergy. *Development and Psychopathology*, *23*(2), 493–506. https://doi.org/10.1017/s0954579411000198

Meier, S. T. (1983). Toward a theory of burnout. *Human Relations, 36*(10), 899–910. https://doi.org/10.1177/001872678303601003

Molina-Praena, J., Ramirez-Baena, L., Gómez-Urquiza, J., Cañadas, G., De la Fuente, E., & Cañadas-De la Fuente, G. (2018). Levels of burnout and risk factors in medical area nurses: A meta-analytic study. *International Journal of Environmental Research and Public Health*, *15*(12), 2800. https://doi.org/10.3390/ijerph15122800

Panisoara, I. O., Lazar, I., Panisoara, G., Chirca, R., and Ursu, A. S. (2020). Motivation and continuance intention towards online instruction among teachers during the COVID-19 pandemic: the mediating effect of burnout and technostress. Int. J. Environ. Res. Pub. Health 17, 8002. doi: 10.3390/ijerph17218002

Park, E.-Y., & Shin, M. (2020). A meta-analysis of Special Education Teachers' burnout. *SAGE Open*, *10*(2), 215824402091829. https://doi.org/10.1177/2158244020918297

Pines, A., & Aronson, E. (1988). *Career burnout: Causes and cures.* Free Press.

Pines, A. M. (1993). Burnout: An existential perspective. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 33–51). Taylor & Francis.

Rapa, L. J., Katsiyannis, A., Scott, S. N., & Durham, O. (2024). School shootings in the United States: 1997–2022. *Pediatrics*, *153*(4). https://doi.org/10.1542/peds.2023-064311

Rubin, J. A., Chilton, G., & Wilkinson, R. (2016). Positive Art Therapy. In *Approaches to art therapy theory and technique*. Essay, Routledge.

Rutter, M., & Madge, N. (1976).Cycles of Disadvantage. London: Heinemann.

Rutter M. (1987). Psychosocial resilience and protective mechanisms. *The American Journal of Orthopsychiatry*, *57*(3), 316–331. https://doi.org/10.1111/j.1939-0025.1987.tb03541.x

Salanova, M., Peiró, J. M., & Schaufeli, W. B. (2002). Self-efficacy specificity and burnout among information technology workers: An extension of the job demand-control model. *European Journal of Work and Organizational Psychology, 11*(1), 1–25. https://doi.org/10.1080/13594320143000735

Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being.* Free Press.

Schaufeli, W. B., Maslach, C., & Marek, T. (Eds.). (1993). *Professional burnout: Recent developments in theory and research.* Taylor & Francis

Schaufeli, W. B. (2006). The Balance of Give and Take: Toward a Social Exchange Model of Burnout. *Revue Internationale de Psychologie Sociale, 19*(1), 87–131.

Schwarzer, R., & Hallum, S. (2008). Perceived teacher self-efficacy as a predictor of job stress and burnout. *Applied Psychology: An International Review, 57*(Suppl 1), 152–171. https://doi.org/10.1111/j.1464-0597.2008.00359.x

Schwarzer, R., & Jerusalem, M. (1995). *General Self-Efficacy Scale (GSE)* [Database record]. APA PsycTests. https://doi.org/10.1037/t00393-000

Schwarzer, R., & Warner, L. M. (2013). Perceived self-efficacy and its relationship to resilience. In S. Prince-Embury & D. H. Saklofske (Eds.), *Resilience in children, adolescents, and adults: Translating research into practice* (pp. 139–150). Springer Science + Business Media. https://doi.org/10.1007/978-1-4614-4939-3_10

Shubin S. (1978). Burnout: the professional hazard you face in nursing. *Nursing*, *8*(7), 22–27. https://doi.org/10.1097/00152193-197807000-00005

Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). *Manual for the State-Trait Anxiety Inventory.* Palo Alto, CA: Consulting Psychologists Press.

Sullivan, D., Sullivan, V., Weatherspoon, D., & Frazer, C. (2022). Comparison of nurse burnout, before and during the COVID-19 pandemic. *Nursing Clinics of North America*, *57*(1), 79–99. https://doi.org/10.1016/j.cnur.2021.11.006

UNESCO (2021). Education: From Disruption to Recovery. UNESCO. Available online at: https://en.unesco.org/covid19/educationresponse#durationschoolclosures (accessed March 18, 2022).

Van Breda, A. (2018). A critical review of resilience theory and its relevance for Social Work. *Social Work*, *54*(1). https://doi.org/10.15270/54-1-611

Ventura, M., Salanova, M., & Llorens, S. (2015). Professional self-efficacy as a predictor of burnout and engagement: The role of challenge and hindrance demands. *The Journal of Psychology: Interdisciplinary and Applied, 149*(3), 277–302. https://doi.org/10.1080/00223980.2013.876380

Walker, B. G. (1988). *The woman's dictionary of symbols and sacred objects*. HarperOne.

Wardle, E. A., & Mayorga, M. G. (2016). Burnout among the counseling profession: A survey of future professional counselors. *I-Manager's Journal on Educational Psychology*, *10*(1), 9. https://doi.org/10.26634/jpsy.10.1.7068

Watson, A. (2022, December 15). *New Jersey district equips schools with 250 armored shields in case of mass shooting - The Boston Globe*. BostonGlobe.com. https://www.bostonglobe.com/2022/12/15/metro/new-jersey-district-equips-schools-with-armored-shields-case-mass-shooting/

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales.

Waugh, C. E., Thompson, R. J., & Gotlib, I. H. (2011). Flexible emotional responsiveness in trait resilience. *Emotion (Washington, D.C.)*, *11*(5), 1059–1067. https://doi.org/10.1037/a0021786

Werner, E., & Smith, R. (1982). Vulnerable but invincible: A longitudinal study of resilient children and youth. New York: Adams, Bannister and Cox.

Westphal, A., Kalinowski, E., Hoferichter, C. J., & Vock, M. (2022). K−12 teachers' stress and burnout during the covid-19 pandemic: A systematic review. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.920326

Wilkinson, R. A., & Chilton, G. (2013). Positive art therapy: Linking positive psychology to art therapy theory, practice, and research. *Art Therapy*, *30*(1), 4–11. https://doi.org/10.1080/07421656.2013.757513

Woolfolk, A. E., Rosoff, B., & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching and Teacher Education*, *6*(2), 137–148. https://doi.org/10.1016/0742-051x(90)90031-y Work and well-being survey results. (2021). *PsycEXTRA Dataset*. https://doi.org/10.1037/e508392021-001